

## CLAIMS:

1. A bicomponent fiber comprising at least three thermoplastic polymers, wherein a mixture of at least two of the polymers have an interfacial tension from 0.5 to 20 mN/m, different viscosities and the mixture comprises a portion of the fiber surface.
2. The bicomponent fiber of Claim 1 wherein the mixture has a viscosity ratio of from 1.5 to 10, or a viscosity ratio of from 0.1 down to 0.05.
3. A fiber comprising a mixture of at least two thermoplastic polymers each having different viscosities and wherein the mixture has an interfacial tension from 0.5 to 20 mN/m, and wherein the mixture comprises a portion of the fiber surface.
4. The fiber of Claim 3 wherein the ratio of the viscosity of the first thermoplastic polymer to the viscosity of the second thermoplastic polymer is from 1.5 up to 10, or from 0.1 down to 0.05.
5. The fiber of claim 3 wherein the fiber is a bicomponent fiber.
6. The fiber of claim 5 wherein the bicomponent fiber is of the sheath core form.
7. The fiber of claim 6 wherein the mixture comprises the sheath.
8. The fiber of claim 7 wherein the sheath comprises less than 20 percent by volume.
9. The fiber of claim 1 wherein the mixture comprises a matrix polymer and a dispersed polymer.
10. The fiber of claim 6 wherein the core comprises a propylene polymer.
11. The fiber of claim 6 wherein the core comprises homopolymer propylene polymer.
12. The fiber of claim 9 wherein the matrix polymer has a melting point at least 10°C or less than a melting point of the dispersed polymer.
13. The fiber of claim 9 wherein the matrix polymer has a melting point and the dispersed polymer is amorphous and has a glass transition temperature  $\leq 10^\circ\text{C}$  than the melting point of the matrix polymer.
14. The fiber of claim 9 wherein the matrix polymer in the sheath and the core each have viscosity within about 30 percent from each other.
15. The fiber of claim 3 wherein the mixture has a viscosity  $\leq 170$  Pa.s at 100 1/s at 250°C.
16. The fiber of claim 9 wherein the dispersed polymer is in particulate form, having an average thickness larger than 1 micron.
17. The fiber of claim 16 wherein the sheath has a thickness smaller than that of the particle.

18. A fiber comprising a mixture of at least two thermoplastic polymers wherein the mixture comprises a dispersed polymer and a matrix polymer, wherein the dispersed polymer exists in particulate form having a size larger than 1 micron and comprises a portion of the fiber surface.
19. The fiber of claim 18 wherein the dispersed particulate forms irregularities on the fiber surface.